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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,265	08/07/2001	George Z. Hu	AD-DYS-102/880322.20002	4890

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NATH & ASSOCIATES
112 South West Street
Alexandria, VA 22314

EXAMINER

HOEKSTRA, JEFFREY GERBEN

ART UNIT	PAPER NUMBER
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3736

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No.	Applicant(s)	
	09/924,265	HU ET AL.	
	Examiner	Art Unit	
	Jeffrey G. Hoekstra	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 and 54 is/are pending in the application.
- 4a) Of the above claim(s) 1-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-52 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/26/2007 has been entered.

Notice of Amendment

2. In response to the amendment filed on 01/26/2007, amended claim(s) 42, 47, 49, 51, and 54, and canceled claim(s) 53 is/are acknowledged. The current rejections of the claim(s) 42-52 and 54 is/are *withdrawn*. The following new and reiterated grounds of rejection are set forth:

Information Disclosure Statement

3. Pursuant to 37 CFR 1.57(e), the Examiner requires the applicant to supply a copy of material incorporated by reference and considered pertinent to Applicant's disclosure, specifically requesting the Non Patent Literature incorporated by reference in the specification at page 13 lines 7-9 describing the known integration technique and entitled "Medical Instrumentation: Application and Design", 3rd Edition, by John G. Webster, John Wiley & Sons, New York 1997. The material must be accompanied by a

statement that the copy supplied consists of the same material incorporated by reference in the referencing application.

Claim Objections

4. Claims 42 and 51 are objected to because of the following informalities: the positive recitation of "said detecting means", "said amplifying means", "said recording means", and "said measuring means" appears to lack antecedent basis, may render the claim indefinite, and is inconsistent throughout the claims. The Examiner notes Applicant may have intended to recite "said means for detecting" for example. Appropriate correction is required.

5. Claim 44 is objected to because of the following informalities: the positive recitation of "the scalp" appears to lack antecedent basis and may render the claim indefinite. The Examiner notes Applicant may have intended to recite "a scalp". Appropriate correction is required.

6. Claim 46 is objected to because of the following informalities: the positive recitation of "said computer" appears to lack antecedent basis and may render the claim indefinite. The Examiner notes "said computer" apparently refers to "a computer controlled visual stimulus generating device" of claim 43, wherein neither in claim 43 nor other claims from which claim 46 depends positively recite the structural limitation of "a computer". Appropriate correction is required.

7. Claims 47 and 49 are objected to because of the following informalities: the positive recitation of "further comprising means for determining whether" appears to

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duplicate the previously claimed structure and may render the claim indefinite. The Examiner notes Applicant may have intended to recite "wherein said means for determining determines". Appropriate correction is required.

8. Claims 48, 50, 52, and 54 are objected to because of the following informalities: the positive recitation of "further comprising means for recording the occurrence" appears to duplicate the previously claimed structure and may render the claim indefinite. The Examiner notes Applicant may have intended to recite "wherein said means for recording records the occurrence". Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationship between "a recording and measuring device" of claim 44 to the "means for recording" and the "means for measuring" of claim 42. It is unclear if Applicant is claiming two distinct recording and measuring devices or alternatively if the structure is duplicated.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 42-52 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaufman et al. (US 5,517,021, hereinafter Kaufman). Kaufman discloses a medical examination system, comprising:

- a means for presenting (display element 88) a series of sensory stimuli for perception by a patient, said means for presenting comprising a computer controlled visual stimulus generating device (as best seen in Figures 3, 9A, and 9B) (column 6 lines 51-57);
- a means for detecting electrical signals (electrode elements 20-30, 60-64, and 102) representative of the patient's evoked potentials in response to said sensory stimuli (column 2 lines 55-68, column 6 lines 45-50), said means for detecting comprising a plurality of electrodes connected to the patient (20-30, 60-64, and 102);
- a means connected to said means for detecting for amplifying (amplifier element 68) said signals (column 6 lines 27-32);
- a means connected to said means for amplifying for converting (A/D converter element 78) said signals into digitized data (column 6 lines 25-39, said means for converting comprising an analog to digital converter (78);

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- a means for recording (memory storage element 84) said data (column 6 lines 38-44, column 6 lines 58-61);
- a means connected to said means for recording for measuring said data (computer element 82) (column 6 lines 38-44, column 6 lines 58-61);
- a means for determining (computer element 82);
- a means connected to said means for measuring for analyzing said data (computer element 82) (column 6 lines 38-44, column 6 lines 58-61); and
- a means connected to said means for measuring for comparing said data (computer element 82) comprises a computer program (column 6 lines 50-61) consisting of algorithms (column 6 lines 50-61) and operates on a computer (computer element 82),
- wherein said means for recording, measuring, determining, analyzing, and comparing said data records, measures, determines, analyzes, and compares said data
 - to predetermined values to determine if said data is outside of predetermined ranges and thus is unreliable data (column 9 lines 28-56),
 - for determining whether said electrical signals reach a maximum value of the output of said means for amplifying said signals due to data saturation (column 7 lines 58-60),
 - for determining and recording if the Fourier component of said electrical signals at 60 Hz exceeds a threshold value via Fourier transform routine (column 4 lines 33-59),

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- for determining and recording if said data abruptly jumps beyond predetermined ranges (column 9 lines 56-58),
- for determining and recording if said signals drift (column 5 line 60 – column 6 line 6) due to poor electrode connection by using an average algorithm (column 8 lines 39-48) to smooth out said electrical signals over a period of time resulting in a curve of average signals versus time, and
- is capable of determining and recording if said signals drift by further integrating each segment of said curve, and determining if the maximum value after segment integration exceeds a threshold value.

Response to Arguments

14. Applicant's arguments with respect to claims 42-52 and 54 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey G. Hoekstra whose telephone number is (571)272-7232. The examiner can normally be reached on Monday through Friday, 8:00 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max F. Hindenburg can be reached on (571)272-4726. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JH

JH

Matthew D. King